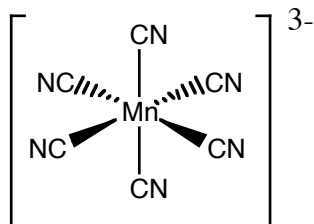


## Ligand Field Theory In-class exercise

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Name the complex ion pictured below:



How many d electrons does the metal center have?

Sketch the energy level diagram for the d orbitals in an  $O_h$  field; then fill in the electrons for the metal ion. Do you expect the ion to be paramagnetic or diamagnetic?

Calculate the spin only magnetic moment.

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